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Job No.: CTCE/BBMP/W.No.08/KRIDL/SDBC/Stripping/2014-15

17.07.2014

Stripping Value of Road Aggregates (Static Immersion Test)

IS: 6241

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Technical Manager,** KRIDL, Bangalore.
Name of the work	Improvements to roads and drains at Muneshwara Layout in Ward No. 8, BBMP, Bangalore.
Reference	AEE/KH/432/2014-15 Dated: 02.06.2014
Type of Mix	Semi Dense Bituminous Concrete
Date of Testing	17.07.2014

Type of binder : 80/100
Percentage of binder used : 5.0% by wt.
Total weight of aggregate : 200 g
Total weight of binder : 10.0 g
Temperature of water-bath : 40° C

Observation Number	Stripping, Percentage	Average, Percentage	Average Retained Coating, %
1	2.6	2.73	97.27
2	2.7		
3	2.9		

Comments:

→ Minimum allowable Aggregate retained coating for Semi Dense Bituminous Concrete is 95%

Note:

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Job No.: CTCE/BBMP/W.No.08/KRIDL/Sp_Wa/2014-15 17.07.2014

Specific Gravity And Water Absorption Test

IS: 2386 Part III

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Technical Manager,** KRIDL, Bangalore.
Name of the Work	Improvements to roads and drains at Muneshwara Layout in Ward No. 8, BBMP, Bangalore.
Reference	AEE/KH/432/2014-15 Dated: 02.06.2014
Type of Mix	Semi Dense Bituminous Concrete
Source / Location	Hotmix Plant, Bangalore
Date of Testing	17.07.2014

Sl. No.	Details	Notation	Test Number			Mean Value
			Test 1	Test 2	Test 3	
1	Weight of aggregate suspended in water with the basket	W_1 g	2011	2012	2014	
2	Weight of basket suspended in water	W_2 g	755	755	755	
3	Weight of saturated aggregate in water	$(W_1 - W_2) = W_s$ g	1256	1257	1259	
4	Weight of saturated surface dry aggregate in air	W_3 g	2007	2011	2014	
5	Weight of water equal to the volume of the aggregate	$(W_3 - W_S)$ g	751	754	755	
6	Weight of oven dried aggregate	W_4 g	1998	2000	2001	
7	Specific Gravity	$W_4/(W_3-W_S)$	2.660	2.653	2.650	2.654
8	Apparent Specific gravity	$W_4/(W_4-W_S)$	2.693	2.692	2.697	2.694
9	Water Absorption	$((W_3-W_4)*100)/W_4$	0.45%	0.55%	0.65%	0.55%

Comments:

→ Maximum allowable Aggregate Water absorption value for Semi Dense Bituminous Concrete is 2.0%

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15.07.2014

DETERMINATION OF FLAKINESS INDEX & ELONGATION INDEX OF COARSE AGGREGATES

Client	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
Agency	**Technical Manager,** KRIDL, Bangalore.
Name of Work	Improvements to roads and drains at Muneshwara Layout in Ward No. 8, BBMP, Bangalore.
Reference	AEE/KH/432/2014-15 Dated: 02.06.2014
Technical Reference	IS 2386(Part 1) 1963 (RA 2007)
Type of Mix	Semi Dense Bituminous Concrete
Date of Testing	15.07.2014

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Result : Flakiness Index = **11.86%**

Elongation Index = **13.47%**

Result : Combined Flakiness & Elongation index **25.33%**

Comments:

→ Maximum allowable Flakiness & Elongation Index for Semi Dense Bituminous Concrete is 30%

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Job No.: CTCE/BBMP/W.No.08/KRIDL/SAND/2014-15 : 03.06.2014

TEST REPORT ON FINE AGGREGATES (SAND)
IS 383-1970 (RA- 2002)

Client : **Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.

Agency : **Technical Manager,** KRIDL, Bangalore.

Name of Work : Improvements to roads and drains at Muneshwara Layout in Ward No. 8, BBMP, Bangalore.

Reference : AEE/KH/432/2014-15 Dated: 02.06.2014

Date of Testing : 03.06.2014

Material : Sand

Total Wt. of Aggregates in gms **2000**

Is Sieve Size in mm	Weight Retained (gm)	Retained Weight in %	Cumulative Retained Weight in %	Cumulative Weight Passing in %	Spec.Limits For Zone-II
10	0	0	0	100	100
4.75	72	3.60	3.60	96.4	90-100
2.36	253	12.65	16.25	83.8	75-100
1.18	437	21.85	38.10	61.9	55-90
600 Micron	495	24.75	62.85	37.2	35-59
300 Micron	462	23.10	85.95	14.1	8-30
150 Micron	205	10.25	96.20	3.8	0-10

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Job No.: CTCE/BBMP/W.No.08/KRIDL/CEMENT/2014-15 Date: 03.06.2014

TEST REPORT

CLIENT	:	**Asst. Executive Engineer,** Kodigehalli Sub Division, BBMP, Bangalore.
AGENCY	:	**Technical Manager,** KRIDL, Bangalore.
NAME OF THE WORK	:	Improvements to roads and drains at Muneshwara Layout in Ward No. 8, BBMP, Bangalore.
REFERENCE	:	AEE/KH/432/2014-15 Dated: 02.06.2014
SAMPLE ID	:	CEMENT
SAMPLES SUPPLIED BY	:	AGENCY

The results of the tests conducted on the cement sample are as follows:

Sl.No	Descriptions	Test Method as per IS	Test Result	Requirements as per IS: 8112-2013
1	Standard Consistency	IS-4031 (Part -4)	30.00 %	-
2	a) Initial Setting Time	IS-4031 (Part -5)	195 Minutes	Not Less than 30 Minutes
	b) Final Setting Time	IS-4031 (Part -5)	460 Minutes	Not More than 600 Minutes
3	Soundness by the Le-Chatelier method	IS-4031 (Part 3)	1 mm	Not more than 10 mm

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